(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



1 (111) 1 (111) 1 (111) 1 (111) 1 (111) 1 (111) 1 (111) 1 (111) 1 (111) 1 (111) 1 (111) 1 (111) 1 (111) 1 (11

(43) International Publication Date 27 July 2006 (27.07.2006)

PCT

(10) International Publication Number WO 2006/079072 A3

(51) International Patent Classification: *E21B 23/01* (2006.01) *E21B 23/04* (2006.01)

(21) International Application Number:

PCT/US2006/002449

(22) International Filing Date: 20 January 2006 (20.01.2006)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/645,840

21 January 2005 (21.01.2005) US

(71) Applicant (for all designated States except US): ENVENTURE GLOBAL TECHNOLOGY [US/US]; 15995 N. Barkers Landing, Suite 350, Houston, TX 77079 (US).

(71) Applicant and

(72) Inventor: DELUCIA, Frank [US/US]; 11415 Lakewood Estates, Houston, TX 77070 (US).

(74) Agent: MATTINGLY, Todd; Haynes and Boone, LLP, 901 Main Street, Suite 3100, Dalla, TX 75202-3789 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): ΛΕ, ΛG, ΛL, ΛΜ, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

- of inventorship (Rule 4.17(iv))

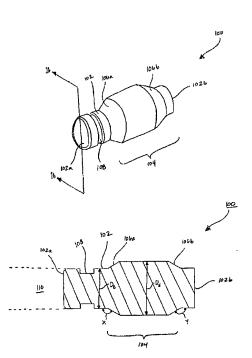
Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 28 December 2006

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR EXPANDING A TUBULAR MEMBER

(57) Abstract: A method and apparatus for expanding a tubular member.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/02449

A. CLASSIFICATION OF SUBJECT MATTER IPC: E21B 23/01(2006.01) E21B 23/04(2006.01),43/10(2006.01)				
USPC: 166/382,383,384,387,207,212,216 According to International Patent Classification (IPC) or to both national classification and IPC				
B. FIELDS SEARCHED				
Minimum documentation searched (classification system followed by classification symbols) U.S.: 166/382, 383, 384, 387, 207, 212, 216, 206, 227, 202, 236				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched				
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) East				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.	
х	US 6,758,278 A (COOK et al.) 06 July 2004 (06.07.2004), column		7-10, 12-18, 20-33, 35, 36, 38, 39-42 and 44-51	
x	X US 6,253,850 A (NAZZAI et al.) 03 July 2001 (03.07.2001)		37	
х	US 3,245,471 A (HOWARD) 12 April 1966 (12.04.1966)		59-67, 76, 78-88, 97, 99, 101 and 103-111	
A US 2003/0146003 A (DUGGAN et al.) 07 August 2003 (07.04.2003)		03 (07.04.2003)	53-55 and 57	
Further	documents are listed in the continuation of Box C.	See patent family annex.		
Special categories of cited documents:		"T" later document published after the inter date and not in conflict with the applica	national filing date or priority tion but cited to understand the	
"A" document defining the general state of the art which is not considered to be of particular relevance		principle or theory underlying the invention Y' document of particular relevance; the claimed invention cannot be		
"E" earlier ap	plication or patent published on or after the international filing date	considered novel or cannot be considered when the document is taken alone	ed to involve an inventive step	
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		considered to involve an inventive step	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being	
"O" document referring to an oral disclosure, use, exhibition or other means		obvious to a person skilled in the art	, , , , , , , , , , , , , , , , , , , ,	
	published prior to the international filing date but later than the ate claimed	"&" document member of the same patent fi		
Date of the ac	ctual completion of the international search	Date of mailing of the international search	h report	
29 August 2006 (29.08.2006) Name and mailing address of the ISA/IIS Authorized officer A D D				
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents		David Bagnell		
PO	Ministration 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Telephone No. 571-272-3600	1	

Facsimile No. (571) 273-3201
Form PCT/ISA/210 (second sheet) (April 2005)